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DISTRIBUTION OF THE FOOD DOLLAR BY MARKETING FUNCTION AND EXPENSE ITEM



REPRINTED FROM THE MARKETING AND TRANSPORTATION SITUATION • NOV. 1974

Tri-Agency Reading Room
Date _____
Room 505
500 14th St., NW
Washington, D. C. 20050

DISTRIBUTION OF THE FOOD DOLLAR BY MARKETING FUNCTION AND EXPENSE ITEM

ABSTRACT: Estimates for 1973 were made of costs and margins at each level in the processing and distribution system for selected major food items purchased in retail food stores. The following foods were studied: beef, pork, fluid milk, butter, eggs, broilers, apples, oranges, tomatoes, potatoes, rice, bread, salad and cooking oil, margarine, and vegetable shortening. For each food item, margins at each level were allocated to the extent possible into the following components: labor, packaging, transportation, business taxes, depreciation, rent, energy, interest, repairs, advertising, other costs and profits. The data show that margins and costs for different marketing functions vary widely among products.

Key Words: Food, margins, marketing, prices, costs.

The food dollar pays for all the services involved in producing, processing, and distributing food. Large cost increases in nearly all phases of marketing—including labor, packaging, and transportation—are a major factor in widening marketing margins and rising retail prices.

For 1973, costs and margins at each level of marketing were estimated for 22 leading food items which are purchased by consumers in retail stores to provide information on rising food costs. Margins and cost components for most of these foods were initially estimated for 1972. Margins for various marketing functions were derived from market prices or by summing the costs for a given function, adjusted to equivalent retail units. Cost and profit components were estimated from survey data, updated by cost indexes where necessary, and are considered approximations. Moreover, estimated cost components for 1973 are not directly comparable with those published for 1972 because of differences in sources of data and estimating procedures used.

The retail prices of the 22 foods studied were broken down by function—retailing, wholesaling, processing, assembly, and farm value—and are shown in table 12. Farm value is the payment to the farmer for the quantity of farm products equivalent to the retail unit. For each food item, margins were allocated to the extent possible into 12 cost components including labor,

packaging, and advertising. Components of margins are shown in tables 14 through 35. Wholesaling costs were not separately identified by cost components for most foods because of lack of data. The total of these costs is shown in the "unallocated" category under wholesaling.

Commodity specialists in the Commodity Economics Division of ERS had major responsibility for developing estimates of cost and profit components of margins from the farm through the wholesale level. Researchers in the National Economic Analysis Division of ERS undertook the studies of margins at the retail level. Names of principal researchers are footnoted.

Margins for different marketing functions vary widely among products due, in part, to differences in the amount of processing, packaging, and bulkiness. Processing or packing margins are less than a fifth of the retail price for about half of the 22 items studied, including the meat and dairy items, broilers, eggs, and fresh oranges, apples, potatoes, and lettuce. In contrast, they are around half of the retail price of applesauce, tomatoes, french fries, and catsup. Labor is the largest component of the processing margin for most products, followed by packaging costs. For several processed products, packaging costs are significantly greater than labor costs. These two costs together account for half to two-thirds of the processing margin for most items. Other cost components, such as business taxes, rent, and repairs each account for around 5 percent of the margin. Energy costs are between 2 to 4 percent of processing margins.

Intercity transportation costs from the processing or packing plant to either a wholesaler or retail store vary

¹These estimates are published in "Developments in Marketing Spreads for Agricultural Products in 1973", ERS-14 (1974), ERS, USDA, April 1974.

Table 12.--Distribution of retail price according to farm value and marketing function, 22 farm food products, 1972 and 1973.

Food item	Farm value 1/	Marketing functions					Retail price
		Assembly and pro- curement	Process- ing	Intercity transpor- tation	Wholesaling	Retailing 2/	
		Cents					
Beef, Choice (pound)							
1973	89.9	1.5	5.8	1.1	8.9	28.3	135.5
1972	72.5	1.3	5.3	.9	8.0	25.8	113.8
Pork, (pound)							
1973	71.5	1.8	12.9	1.1	2.4	20.1	109.8
1972	47.9	1.5	14.9	.9	2.0	16.0	83.2
Broilers, (pound)							
1973	35.3	1.2	6.7	1.1	2.9	12.4	59.6
1972	20.1	1.0	6.2	1.1	2.9	10.1	41.4
Eggs, grade A or AA large (dozen)							
1973	54.4	.9	8.1	1.2	2.8	10.7	78.1
1972	29.9	.8	7.6	1.2	2.8	10.1	52.4
Milk, sold in stores ($\frac{1}{2}$ gallon)							
1973	33.2	2.5	11.6	$\frac{3}{3}$	13.0	5.1	65.4
1972	29.4	2.2	9.9	$\frac{3}{3}$	11.8	6.5	59.8
Butter, (pound)							
1973	62.9	3.2	5.1	1.4	2.0	17.0	91.6
1972	63.8	2.3	5.5	1.3	2.5	11.7	87.1
Apples (3 pound bag)							
1973	30.4	2.9	14.2	5.8	5.9	28.1	87.3
1972	24.4	2.8	14.1	4.8	6.0	18.1	70.2
Oranges, Calif. (doz.)							
1973	32.9	1.5	16.8	10.3	6.9	57.0	125.4
1972	26.5	1.4	13.7	9.9	5.6	54.0	111.1
Tomatoes, Florida (lb)							
1973	13.6	.5	4.8	3.0	11.0	16.6	49.5
1972	14.2	.5	4.4	2.9	10.4	15.7	48.1
Lettuce, Calif. (head)							
1973	7.8	.3	7.9	6.1	2.9	16.8	41.8
1972	3.3	.3	6.9	5.9	2.2	14.6	33.2
Potatoes (10-lb. bag)							
1973	49.8	$\frac{4}{4}$	22.1	12.6	3.9	34.1	122.5
1972	29.0	$\frac{4}{4}$	19.1	12.0	1.5	27.0	88.6
Applesauce (303 can)							
1973	5.3	.3	12.2	.9	1.8	5.4	25.9
1972	2.9	.3	10.7	.9	2.1	5.9	22.8
Orange juice (46-ounce can)							
1973	13.0	.9	19.1	6.8	$\frac{5}{5}$	9.5	49.3
1972	16.2	.9	17.9	6.0	$\frac{5}{5}$	8.6	49.6
Orange juice, frozen (6-ounce can)							
1973	8.2	.5	6.5	1.1	3.2	5.6	25.1
1972	9.2	.5	6.0	1.1	3.0	5.2	25.0
Tomatoes, Calif. whole (303 can)							
1973	2.4	.5	13.9	2.2	1.1	4.6	24.7
1972	2.2	.5	13.3	2.2	.6	4.0	22.8
Tomato catsup, Calif. (14-ounce bottle)							
1973	3.6	.7	15.6	2.9	3.5	5.4	31.7
1972	3.1	.7	15.0	2.8	3.4	5.2	30.2

Continued

Table 12.--Distribution of retail price according to farm value and marketing function, 22 farm food products, 1972 and 1973 Continued.

Food item	:	:	Marketing functions					:
	Farm	Assembly	Process-	Intercity		Retailing	Retail	
	value	and pro-	ing	transpor-	Wholesaling	:	price	
	<u>1/</u>	curement		tation		<u>2/</u>		
	:		<u>Cents</u>					:
Potatoes, french fried:	:							
(9-ounce package)	:							
1973	4.3	<u>4/</u>	8.5	1.0	1.0	2.4	17.2	
1972	2.5	<u>4/</u>	9.2	1.0	1.2	2.7	16.6	
Bread, white (pound)	:							
1973	6/4.1	.3	<u>7/</u> 8.4	<u>8/</u> .3	9.1	5.4	27.6	
1972	<u>6/</u> 2.8	.3	<u>7/</u> 7.7	<u>8/</u> .3	9.0	4.6	24.7	
Rice, long grain	:							
(pound)	:							
1973	16.9	<u>4/</u>	<u>9/</u> 9.2	-	-	4.7	30.8	
1972	9.3	<u>4/</u>	<u>9/</u> 10.6	-	-	4.1	24.0	
Salad and cooking oil	:							
(24-ounce)	:							
1973	21.9	6.2	31.3	1.6	3.5	6.1	70.6	
Margarine, (pound)	:							
1973	14.0	3.5	11.8	.4	1.8	5.9	37.4	
Vegetable shortening	:							
(3 pounds)	:							
1973	48.8	13.0	36.4	1.6	5.5	5.3	110.6	

1/ The farm value is the gross return to farmers for the quantity of farm products equivalent to the unit sold at retail minus imputed value of byproducts. Because of losses from processing, waste, and spoilage the farm value represents larger quantities than the retail unit.

2/ In-store costs only. Headquarters and warehousing expenses are included in wholesaling.

3/ Included in wholesaling.

4/ Included in farm value.

5/ Implicity included in costs of other functions.

6/ Wheat only, other ingredients included in processing.

7/ Flour milling and bread baking.

8/ Flour only.

9/ Milling, packaging, transportation and wholesaling combined.

widely among items, reflecting differences in perishability, bulkiness, and the distance they are shipped. Costs of shipping meat, dairy items, broilers, and eggs, which are relatively dense in volume and of high value, account for only 2 to 3 percent of the retail selling price. But shipping costs for the fresh fruits and vegetables are 10 percent or more of the retail price.

Retail store margins for the 22 items ranged between 5 and 45 percent of the retail selling price but most were between 15 and 20 percent. Labor is by far the largest cost component: for most items making up from 50 to 60 percent of the store margin. Packaging costs including grocery bags, averaged 4 percent of the retail store margin but are higher for beef, which is cut and wrapped in the store, than for other products which in most instances are already packaged when they arrive at the store. Most other cost components are around 5 percent or less of the retail in-store margin.

Margins for most items increased at all levels of marketing in 1973 over 1972, reflecting an increase in the farm-retail spread for most food products. Processing or packing margins rose between 4 and 9 percent for 9 items, and around 15 percent for 4 items. Retail store margins increased between 4 and 11 percent for 7 items, and 15 to 21 percent for 5 items. Most of the increase in margins can be attributed to higher labor costs and other operating expenses.

While margins rose, increases in farm value accounted for most of the increase in retail prices of the items studied from 1972 to 1973. The percentage change in farm value for most items was greater than the percentage change in retail price. The farmer's share of the retail price of 13 of the items increased in 1973 over 1972, mainly as the result of the increases in farm values.

Retail Store Margins²

Retail costs and profits were estimated for typical supermarket operations. About three-quarters of grocery store sales were made through supermarkets in 1973, and more data are available on their costs than on costs for other foodstores.

The first step in estimating the cost and profit components comprising retail margins for the individual foods was to estimate gross margins for each food item. This work was based on data published in "Chain Store Age" and "Progressive Grocer" trade journals, Cornell University reports of "Operating Results of Food Chains," Purdue University studies of independent retail store operations, and ERS price spread data series.³ In-store gross margins for most food items were figured

using average retail prices collected by BLS. These prices are regularly used by ERS in deriving farm-retail price spreads.

Headquarters expense for food chains was not treated as part of the retail store margin and therefore some adjustments were made in gross margins to remove this expense item. Headquarters expense is included in the wholesaling margins along with warehousing and delivery costs.

Gross margins were also computed for major store departments, such as meat and produce, and for the total store to control the allocation of the in-store margin to individual items (table 13). The overall retail store gross margin was estimated to be 17.2 percent of sales for 1973.

Cost and Profit Components

Cost and profit components of the gross margins were estimated in three basic steps for individual products using data from the previously mentioned sources and data generated by COSMOS (Computer Optimization and Simulation Modeling for Operating Supermarkets), a management tool developed by Case and Co., under contract for the National Association of Food Chains.

First, direct labor costs and packaging, which accounted for about 29 percent of the in-store retail margin, were allocated to individual products based on COSMOS data and a survey of chain store handling practices. COSMOS provided the data on handling time needed to perform the different tasks involved in moving products through supermarkets. These handling times were weighted by the practices used by some of the larger chains. Handling times were multiplied by typical wage rates for each type of work done to estimate the direct labor cost. Case and Co. also provided information for estimating packaging costs, equipment depreciation, and direct energy costs for individual products.

The second step involved allocating costs related to space and equipment (rent, utilities, insurance, taxes, depreciation, and repairs) to individual products. These costs were allocated on the basis of average space utilization and inventory turnover of departments and individual products in a typical supermarket. This allocation took into account the fact that the meat and produce departments have a lower density of product display than grocery products. Products selling more units in a given space have a higher turnover rate and consequently a lower unit cost as the cost of the space is divided by more units. Space-related costs for the average product account for 22 percent of the in-store margin.

Advertising, including promotion, accounting for 9 percent of the in-store margin, was allocated to individual items in the ratio of total advertising costs to store sales. This procedure recognizes that trading stamps are given on the basis of sales and much of the media advertising tends to influence sales of all products.

²Principal researchers were Terry Crawford and Gerald Feaster.

³The mention of company names in this study is for identification only and does not constitute endorsement by USDA over any companies not mentioned.

Table 13.--Estimated in-store gross margins, costs, and profits of supermarkets, by major departments, 1973 1/

Item	Meat	Produce	Dry grocery	Dairy <u>2/</u>	Frozen foods	Total store
	Percent of sales					
Labor	11.07	14.92	7.92	7.37	8.54	8.94
Direct	2.62	5.49	4.37	3.01	6.36	4.02
Departmental	5.72	5.47	1.23	1.13	1.37	2.38
General	1.96	2.92	1.77	2.71	.22	1.92
Fringe benefits .	.77	1.03	.55	.51	.59	.62
Packaging	1.49	.78	.50	.46	.84	.73
Repairs	.39	1.18	.26	.31	1.07	.39
Energy	.79	2.89	.33	.66	2.74	.74
Depreciation	.58	1.75	.39	.47	1.59	.58
Business taxes	.80	1.41	.56	.54	1.03	.68
Rent	.84	2.26	1.42	.54	1.34	1.24
Interest	.17	.25	.15	.20	.05	.16
Advertising <u>3/</u>	1.54	1.54	1.54	1.54	1.54	1.54
Other	1.85	2.91	1.58	2.46	.58	1.09
Profit before taxes	1.18	1.71	1.00	1.40	.35	1.10
Total	20.70	31.60	15.65	15.95	19.67	17.19

1/ In-store margins exclude warehousing and delivery costs and headquarters expense. 2/ Includes ice cream and other refrigerated items such as bakery products, fruit juices, and dips. 3/ Includes 0.05 cent for labor.

For each product, 1.5 percent of its retail price was allocated to advertising.

After accounting for direct labor costs, space-related costs, and advertising, the remaining 40 percent of the in-store margin representing indirect store labor, primarily wages and salaries of checkers and managers, interest expense, other costs, and profit was distributed to each product according to the share of the remaining store margin represented by each costs. Of the residual margin, 66 percent was allocated to labor, 2 percent to interest, 16 percent to other costs, and 16 percent to profit. While profit was a sixth of the residual margin, it made up 1.1 percent of total store sales.

The typical store showed an in-store margin of 17.2 percent of sales for 1973, compared with 17.5 percent a year earlier. Increased sales bolstered by price increases lowered the margin as a percent of sales but raised it in total dollars. The labor cost remained unchanged at 8.94 percent of sales, while advertising and promotional expense dropped to 1.54 percent from 1.80 percent in 1972. This savings plus reductions in other costs resulted in an increase in profit before taxes from 0.94 to 1.10

percent of sales although there was a slight drop in the total margin. Within the store, margins shifted—three departments showed decreases and two showed increases, in effect canceling each other out.

Distribution of Retail Prices for Individual Foods

Beef and Pork (tables 14 and 15)*

Retail beef prices averaged \$1.35 per pound in 1973. Returns to farmers for the live animal equivalent to a retail pound of meat amounted to 90 cents, two-thirds of the retail price.

The farm-carass spread for beef averaged 8.4 cents per retail pound in 1973. Subtracting estimated farmer marketing costs of 1.5 cents lowered the spread to 6.9 cents. The cost of transporting meat from the packing plant to the city where consumed—1.1 cent—was

*Principal researcher Lawrence Ducwer.

subtracted from the spread leaving a processing margin of 5.8 cents, about 9 percent higher than in 1972. The processing margin includes the cost for everything that occurs from the time the packer-slaughterer purchases the cattle until the carcasses are sides or quarters, ready to be shipped from the packing plant. The retail store margin for beef amounted to 28 cents in 1973 compared with about 26 cents in 1972.

Retail pork prices averaged \$1.10 per pound in 1973. Returns to farmers for the live animal equivalent to a retail pound averaged 72 cents, about two-thirds of the retail price.

The farm-wholesale spread for pork averaged 15.8 cents per retail pound in 1973, the lowest it had been since 1966. Farmer marketing costs were estimated to be 1.8 cents, and the cost of transporting meat from the processing plant to the city where consumed was estimated at 1.1 cents, leaving a processing margin of 12.9 cents. The processing margin includes the costs from the time the packer-slaughterer purchases the hogs until the carcasses are processed into primals, smoked hams, cured bacon, and other products ready to leave the plant. The retail store margin for pork amounted to 20.1 cents in 1973 compared with 16 cents in 1972.

Estimates of components of the processing margin were based on data obtained from a study, by Food Management Inc., of packer costs by size of plant in six regions of the country. This firm used data from a survey of packing plants and knowledge gained as a consultant to the meat and food industry. Efficiency and costs and profits vary greatly among plants due to plant size, age, and location. Data were weighted to obtain a U.S. average by the numbers and sizes of plants by region obtained from data collected by the Animal and Plant Health Inspection Service, USDA. Survey data for pork were for slaughtering and cutting only and therefore had to be adjusted to include the processing activities such as smoking hams and curing bacon, since the adjusted farm-wholesale spread for pork includes processing. Cost data for meat packing and meat processing firms reported by the American Meat Institute (AMI) in *Financial Facts* were used to adjust the cost estimates for pork to include the processing activities. Profit estimates were based on information from *Moody's Industrial Manual* and AMI's *Financial Facts*. All data were adjusted to the level of the processing margin derived from price spreads for beef and pork.

Procedures explained above differ from those used to obtain estimates for 1972. The improved sources of data used for 1973, while providing more reliable estimates, make comparisons of cost component of margins data between the two years very difficult. For example, labor costs for 1973 cover only direct line operations while 1972 labor estimates included administration salaries, shipping and selling department salaries, and other indirect salary expenses.

Broilers (table 16)⁵

Costs of assembling, processing (slaughter and eviscerating), transporting, and distributing were estimated for ready-to-cook, ice-packed broilers. Allowance was made for grading loss costs.

Sources of data used in estimating cost and profit components were: (1) previously published research reports; (2) preliminary results from ongoing ERS and State cooperative agreement studies; (3) contacts with a limited number of plant managers; (4) trade association data on intercity transportation costs, and; (5) contacts with extension personnel.

Broiler assembly and processing costs rose from 1972 levels, and retail store margins widened. Increased wage rates were primarily responsible. Rising energy and package costs late in 1973 had little influence on yearly average costs. Broiler assembly and processing costs have been trending upward for several years as increased input costs, particularly labor, exceeded the small gains in efficiency which occurred.

Eggs (table 17)⁵

Costs estimated for assembling, processing (grading, cartoning, packing), transporting, and distributing eggs include handling losses. Sources of data used in estimating costs and profit components were: (1) recent State and industry studies; (2) preliminary results from ongoing ERS and State cooperative agreement studies; (3) intercity transportation costs from the Market News Service, and; (4) contacts with extension personnel.

Egg assembly and processing costs rose from 1972 levels and retail store margins averaged slightly wider. Increased wage rates were important influences in increasing 1973 costs. Packaging cost also raised 1973 processing costs. Energy cost increases in late 1973 did not influence yearly average costs much. Egg assembly and processing costs have been rising in recent years as increased input costs began to exceed gains in efficiency.

Grade A Milk Sold Through Stores (table 18)⁶

The retail price of a half-gallon of milk averaged 65.4 cents in 1973, 5.6 cents more than in 1972. Higher farm prices raised the farm value of milk 3.8 cents to 33.2 cents.

An increase in procurement and assembly costs, determined from accounting records of producer cooperatives and from Federal order market data, was due largely to higher transportation costs. The farmer pays about 1.5 cents of the transportation cost and cooperatives pay the remaining procurement and assembly cost of about 1.0 cent. The cost of a minor

⁵ Principal researcher George Rogers.

⁶ Principal researcher Charles Shaw.

portion of assembly and procurement services performed by the processor is included in the processing margin.

Costs and margins of milk dealers, obtained from accounting records of processors and distributors by contract with a private accounting and consulting firm, were prorated to processing and wholesaling based on average costs of 30 firms. Both wholesaling and processing margins increased in 1973, reflecting higher operating expenses and a substantial increase in profits. Profits were obtained directly from the data but "other" cost is a residual. These data are for calendar year 1973, and it was only during the last quarter of this period that prices and margins showed marked increases. While other margins increased, the retail store margin declined 1.4 cents to 5.1 cents or only 8 percent of the retail price.

Butter (table 19)⁷

The retail price of butter averaged 91.6 cents per pound in 1973, 4.5 cents higher than in 1972. Over two-thirds of the selling price consisted of the farm value of butterfat in 1 pound of butter.

Costs of hauling milk used in butter manufacturing amounted to 2.7 cents and other procurements costs 0.5 cent per pound of butter produced in 1973. Manufacturing costs for butter amounted to 5.1 cents and wholesaling costs, 3.4 cents. These estimates are based on 1972 and 1973 data from cooperatives and plants accounting for more than one-third of the total butter produced. The 1972 data were updated to 1973 by using indexes of marketing costs maintained by ERS. Costs are a weighted average of the handling methods consisting of butter that is printed and packaged directly from the churn (soft printing) and butter that moves in bulk to wholesalers (hard printing). Wholesaling costs include all intercity transportation costs but only the proportionate share of the cost of other functions performed separately from manufacturing.

Butter production and the number of plants making butter continued downward last year. Production dropped to 918.6 million pounds, 17 percent below 1972. There were 422 plants making butter in 1973, 53 less than in the previous year. Butter manufacturers were in a depressed state during much of 1973, suffering from rising costs and an inability to procure, manufacture, and sell an adequate volume. Production per plant decreased slightly last year, an unusual situation which affected unit costs. However, the larger plants apparently continued to produce an increasing proportion of butter, especially soft-printed butter.

Fruits and Vegetables⁸

Retail prices in 1973 increased for 10 of the 11 fresh and processed fruits and vegetables studied. Price

increases ranged from less than 0.5 percent for frozen concentrated orange juice to 38 percent for fresh potatoes. For most commodities, retail price increased more for the fresh than the processed form. For example, the retail price for fresh potatoes increased 38 percent and frozen french fries, 4 percent; fresh apples increased 24 percent and canned applesauce, 14 percent; and fresh oranges rose 13 percent and frozen concentrated orange juice, 0.4 percent.

Farm value increased in 1973 for all products except fresh tomatoes and processed orange juice. Increases ranged from 9 percent for canned tomatoes to 136 percent for lettuce. Marketing margins also increased in 1973 for all products except frozen french fried potatoes. Assembly and procurement costs and intercity transportation costs increased slightly or remained the same as in 1972. Processing and retailing margins increased for most fruits and vegetables.

The distribution of the retail price among the various marketing functions and farm value ranged widely for different items in 1973 (table 12). However, there were some similarities.

Farm value's share of the retail price was between 19 and 27 percent for over half of the items in 1973, including fresh tomatoes, lettuce, oranges, canned orange juice and applesauce, and frozen french fried potatoes. It accounted for about 10 percent of the retail price of canned tomatoes and catsup. The farmer's share of retail price was higher in 1973 for five items, and smaller for three items, and the same for two items.

The processor's share of the retail price was larger for canned and frozen products than for fresh items. Packing costs took from 11 to 20 percent for most fresh items and processing costs took nearly 50 percent or more for canned and frozen items. Packing cost's share of each fresh item in 1973 was 2 to 4 percentage points less than in 1972. The share declined from 1 to 6 percentage points for each processed item except frozen concentrated orange juice.

Intercity transportation took from 6 to 8 percent of the retail price of fresh apples, oranges, and tomatoes, 10 percent for fresh potatoes, and 15 percent for lettuce. Transportation's share was from 3 to 6 percent for frozen orange juice, frozen potatoes, and canned applesauce, 9 percent for processed tomatoes, and 14 percent for canned orange juice. Transportation's share of the retail price changed very little from 1972 for most items.

The retailer's share of the retail price was largest for fresh products, ranging from 28 to 45 percent in 1973. The share ranged from 17 to 22 percent in 1973 for all processed products except frozen french fried potatoes. The retailer's share in 1973 was from 1 to 6 percentage points larger than in 1972 for five items, 2 to 5 points smaller for five items, and unchanged for one item. Estimates of costs and margins for fruits and vegetables are based primarily on data for the 1972/73 crop year obtained from surveys of firms and various other

⁷ Principal researcher William Jones.

⁸ Principal researchers were N.A. Wynn and Joseph Podany.

sources. These data were updated and adjusted to a calendar year using published prices and cost indexes of labor rates and various other costs and volume data on the proportion of the crop reaching the consumer during the year.

Fresh Apples (table 20)

The U.S. average retail price of a 3-pound bag of apples was 87.3 cents in 1973, 24 percent higher than a year earlier. The farm value averaged 30.4 cents or 35 percent of the retail price, the same share received in 1972. Retailing was the most costly marketing function, averaging 28.1 cents in 1973, 10 cents more than in 1972. The retailing share of the consumer's dollar increased from 26 percent in 1972 to 32 percent in 1973. Packing costs, consisting largely of labor and packaging, changed little in 1973 but declined as a proportion of the retail price.

Applesauce (table 21)

Retail applesauce prices averaged 25.9 cents for a No. 303 can in 1973, about 3 cents more than in 1972. The farm value of apples used per No. 303 can nearly doubled to 5.3 cents and accounted for over half the increase in the retail price.

The estimated margins for retailing and wholesaling applesauce declined slightly in 1973 from 1972. In contrast, the processor's margin, which is a residual derived from the f.o.b. price minus the farm value, increased 14 percent over 1972. Based on surveys of processing costs in 1970 and 1973, packaging is by far the largest cost, amounting to over 5 cents per No. 303 can.

Fresh Oranges (table 22)

The retail price of California navel and valencia oranges averaged \$1.25 per dozen in 1973, 14 cents higher than in 1972. About half of this increase went to the grower, raising the farm value to 32.9 cents in 1973. Packing and retailing margins increased about 3 cents each, while wholesaling costs rose 1.7 cents.

The retail margin accounted for 45 percent of the retail price of oranges in 1973, slightly less than in 1972. Packing and wholesaling costs were each about 15 percent of the retail price in both years.

Orange Juice (tables 23 and 24)

Both farm value and retail price of single strength orange juice in 46-ounce cans declined between 1972 and 1973. Farm value declined by 20 percent from 16 to 13 cents, but the retail price declined by less than 1 percent. Prices for processing oranges were depressed in 1972-73 because of a very large crop. The farm value of oranges for frozen concentrate also decreased, averaging 11 percent less in 1973.

Retail prices for frozen juice rose by less than 1 percent. With farm prices down and retail prices steady, margins of processors, wholesalers, and retailers increased. Both the processing and retailing margins increased by 8 to 10 percent.

Fresh Tomatoes (table 25)

The U.S. average retail price of Florida winter and early spring tomatoes averaged 49.5 cents a pound in 1973, 1.4 cents higher than a year earlier. All of the retail price increase went for higher marketing charges. The farm value declined 0.6 cent a pound to 13.6 cents.

The retail margin accounted for about one-third of the retail price in both 1972 and 1973. Farm value took 27 percent of the retail price in 1973, down from 30 percent in 1972. The share of the retail price going to wholesaling and processing each increased slightly in 1973, to 28 percent and 11 percent, respectively.

Canned Tomatoes and Catsup (tables 26 and 27)

About 80 percent of the tomato crop for processing is produced in California. Since nearly all of the crop is produced under contract for processing, most producers have a market for the crop before it is planted. Farm prices are more stable for tomatoes than for oranges for processing. The farm value rose 9 percent for tomatoes used for whole canned tomatoes and 10 percent for tomatoes used for catsup in 1973.

From 1972 to 1973 tomato processors increased their margin by about 4 percent, or less than the increased cost for the period. Thus profits were reduced.

The retailer's margin increased by 15 percent on a No. 303 can of tomatoes between 1972 and 1973 and 4 percent for catsup.

Lettuce (table 28)

The U.S. average retail price of California lettuce was 41.8 cents a head in 1973, 8.6 cents higher than a year earlier. More than half of the retail price increase was returned to the grower. Farm value increased from 3.3 cents a head in 1972 to 7.8 cents in 1973. The farm value accounted for 19 percent of the retail price in 1973, up from 10 percent a year earlier. The retail margin, the largest marketing function, accounted for 40 percent of the retail price in 1973 compared with 44 percent in 1972. The share of the retail price going to wholesaling and processing both declined slightly in 1973.

Potatoes (Fall), Fresh (table 29).

Responding to a smaller supply of fresh potatoes in the first half of 1973, the U.S. average retail price of a 10-pound bag of fresh fall potatoes averaged \$1.22 in 1973, 34 cents or 38 percent higher than a year earlier. Over two-thirds (21 cents) of the retail price increase was returned to the grower. Farm value averaged 49.8

cents in 1973 and represented 41 percent of the retail price, up from 33 percent in 1972. The absolute margin for each marketing function increased slightly in 1973 but the share of the retail price taken by each marketing function declined slightly. Market shares of the retail price in 1973 were: retailing, 28 percent; wholesaling, 13 percent; and processing, 18 percent.

French Fried Potatoes (table 30)

The value of potatoes for processing increased by 72 percent from 1972 to 1973, due mainly to a short crop. This increased cost squeezed the processing, wholesaling, and retailing margins for a 9-ounce package of frozen french fried potatoes. The retailer's margin dropped by 11 percent, the wholesaler's by 17 percent, and the processor's by 8 percent. The retail price rose about 4 percent to 17.2 cents.

Rice (table 31)⁹

The retail price of regular long grain rice averaged 30.8 cents per pound in 1973 compared with 25 cents in 1972, an increase of 28 percent. Influenced by world demand, which pulled up domestic milled rice prices, the farm value of rice rose more than the retail price in 1973 and the farm-retail spread declined 0.9 cent per 1-pound package. The retailing spread widened over 0.5 cent a pound in 1973 but the combined milling, packaging, and wholesaling margin, accounting for the remaining farm-retail spread, narrowed nearly 1.5 cents.

Bread (White pan) (table 32)⁹

The retail price of a 1-pound loaf of bread in 1973 averaged 27.6 cents, 2.9 cents above the 1972 price. Due to restraints on wholesale and retail prices of bread during most of the year and the freedom of farm value and flour prices to move up, the distribution of the bread price changed considerably between 1972 and 1973. Wheat and flour prices rose substantially in 1973 for the first time in many years, reflecting the strong demand for wheat. The farm value of the wheat used in a loaf of bread increased from 2.9 cents in 1972 to 4.1 cents.

The cost for assembling wheat to the flour mill, mainly transportation, rose 10 percent from 1972 to 0.3 cent per loaf of bread in 1973. Costs of milling wheat, represented by the flour miller's spread, rose from 0.7 cent in 1972 to 1.0 cent in 1973. This was the largest percentage increase for any function. Costs of transporting flour from the miller to the baker amounted to about 0.3 cent per loaf of bread in 1973, slightly less than a year earlier. This decrease possibly reflects a shift of milling operations closer to flour

demand centers, more bulk flour shipments, lower-rate modes of transportation, and larger volume purchases of flour by bakers. The costs of baking and wholesaling bread, including non-flour ingredients, amounted to 16.5 cents in 1973, only slightly more than in 1972. The retailer's spread rose 0.8 cent to 5.4 cents in 1973.

Based on changes in indexes of hourly earnings and other costs, most of the increase in the margins for baking and distributing bread can be attributed to higher labor costs and the cost of non-flour ingredients. Estimated profits for assembling wheat and flour milling were higher in 1973 than in 1972 while profits of baker-wholesalers declined, possibly because they were unable to adjust margins for increased costs during economic controls.

Vegetable Oil Products (tables 33, 34, 35)¹⁰

Cost and profit components for 1973 were estimated for three vegetable oil products—salad and cooking oil, margarine, and vegetable shortening. Soybean oil constitutes a large portion of the fats and oils used in the manufacture of these products. For example, approximately 80 percent of the oil used in making margarine is soybean oil. Because of this we used costs of milling and processing soybean oil to represent all of the oils used in the manufacture of these oil products.

Costs associated with crushing soybeans and processing the oil were obtained from oil mills, equipment manufacturers, and consultants. These data were considered representative of the U.S. soybean industry, both in terms of size of mill and costs incurred. The costs of crushing a bushel of soybeans were distributed to oil and meal in proportion to the value of output of each product in 1973, estimated from yield data reported by the Bureau of Census and average prices of oil meal. Crushing costs per pound of oil were then multiplied by the quantity of oil in each product to obtain the costs for consumer-size packages.

The 1972/73 crop year was far from being typical as far as the prices of soybeans and other oilseeds were concerned. Shortly after harvest, a world protein shortage drove up soybean prices. This resulted in unusually large margins in certain areas of the soybean marketing chain. Country shippers benefited from this rapid rise in soybean prices, therefore, the assembling and storing segment shows a wider margin than usual. The substantial rise in the price of soybeans already in the hands of crushers and processors resulted in larger margins for oil products. The makeup of the data also contributes to larger margins in such times of rapidly rising prices since farm value is a weighted figure whereas all the other figures used are simple averages.

In 1973, the retail price of a 24-ounce bottle of salad and cooking oil averaged 70.6 cents. The farm value of

⁹ Principal researcher J.C. Eiland.

¹⁰ Principal researcher Harry Doty.

the soybean oil represented in 24 ounces of salad and cooking oil was 21.9 cents. Thus, the farm-retail spread is 48.7 cents. Most of this spread is in milling and processing, with over 9 cents in packaging. The unallocated figure is high due to the rise in soybean prices. Most of the labor and energy costs were in the processing operations which take place after crushing.

The retail price of margarine in 1973 was 37.4 cents per pound and the farm value was 14 cents, most of which was attributable to the cost of oil. The spread between farm value and retail price was 23.4 cents. Packaging accounted for almost 2 cents of this spread.

Most of the labor and energy costs were associated with further processing rather than crushing. The 7 cents in the "other" cost category comes primarily from costs of ingredients other than oil.

Vegetable shortening had a retail price of 110.6 cents per 3-pound can in 1973 while its farm value was 48.8 cents. Thus, the farm-retail spread was 61.8 cents. A packaging cost of 11.3 cents is part of this spread. The unallocated figure is large partly because of the costs shown are for crushing only. Most of the remainder is due to the rapid rise in the price of soybeans after they were in the hands of the processor.

Table 14.--Beef (Choice): Components of margins per pound at retail, 1973

Costs and profit	Farm value	Marketing functions				Retail price
		Assembly of live animal	Pro- cessing	Whole- saling	Retail- ing	
		<u>Cents</u>				
Labor	-	-	1.5	-	15.9	-
Packaging	-	-	0.2	-	2.8	-
Transportation ...	-	-	0.6	<u>1/</u> 1.1	-	-
Business taxes ...	-	-	0.1	-	1.0	-
Depreciation	-	-	0.3	-	.5	-
Rent	-	-	0.2	-	.7	-
Repairs	-	-	0.2	-	.3	-
Advertising	-	-	0.1	-	2.1	-
Interest	-	-	0.3	-	.2	-
Energy	-	-	<u>2/</u> 0.2	-	.6	-
Other	-	-	1.6	-	2.5	-
Profit	-	-	0.5	-	1.7	-
Unallocated	-	-	-	8.9	-	-
Total	89.9	1.5	5.8	10.0	28.3	135.5

1/ Intercity.2/ Includes all "energy" and water.

Table 15.--Pork: Components of margins per pound at retail, 1973

Costs and profit	Farm value	Marketing functions				Retail price
		Assembly of live animal	Pro- cessing	Whole- saling	Retail- ing	
		<u>Cents</u>				
Labor	-	-	5.5	-	10.6	-
Packaging	-	-	0.9	-	.7	-
Transportation ...	-	-	0.6	<u>2/</u> 1.1	-	-
Business taxes ...	-	-	0.1	-	.8	-
Depreciation	-	-	0.3	-	.8	-
Rent	-	-	<u>1/</u>	-	1.1	-
Repairs	-	-	0.3	-	.5	-
Advertising	-	-	0.2	-	1.3	-
Interest	-	-	0.3	-	.2	-
Energy	-	-	<u>3/</u> 0.4	-	1.1	-
Other	-	-	3.4	-	1.7	-
Profit	-	-	0.9	-	1.3	-
Unallocated	-	-	-	2.4	-	-
Total	71.5	1.8	12.9	3.5	20.1	109.8

1/ Less than 0.1 cent.2/ Intercity.3/ Includes all "energy" and water.

Table 16.--Broilers: Components of margins per pound at retail, 1973

Costs and profit	: Farm : : value : : 1/ :	Marketing functions				: Retail price
		: Assembly :	: Processing :	: Wholesaling :	: Retailing :	
			Cents			
Labor	-	-	3.2	-	6.9	-
Packaging	-	-	.8	-	.6	-
Transportation ...	-	2/ 1.2	-	4/ 1.1	-	-
Business taxes ...	-	-	.1	-	.5	-
Depreciation	-	-	.3	-	.3	-
Rent	-	-	3/	-	.5	-
Repairs	-	-	.3	-	.2	-
Advertising	-	-	-	-	.9	-
Interest	-	-	.1	-	.1	-
Energy	-	-	.4	-	.4	-
Other	-	-	1.0	-	1.2	-
Profit	-	-	.5	-	.8	-
Unallocated	-	-	-	5/ 2.9	-	-
Total	35.3	1.2	6.7	4.0	12.4	59.6

1/ Estimated live value converted to ready-to-cook equivalent. Few sales of live broilers occur because most production is under contract to integrated firms.

2/ Includes labor, fuel, truck costs, and profit.

3/ Less than 0.1 cent.

4/ Intercity.

5/ Includes local transportation.

Table 17.--Eggs, Grade A or AA large: Components of margins per dozen at retail, 1973

Costs and profit	: Farm : : value : : 1/ :	Marketing functions				: Retail price
		: Assembly :	: Processing :	: Wholesaling :	: Retailing :	
			Cents			
Labor	-	-	2.0	-	5.3	-
Packaging	-	-	3.4	-	.3	-
Transportation ...	-	1/ 0.9	-	2/ 1.2	-	-
Business taxes ...	-	-	.4	-	.3	-
Depreciation	-	-	.4	-	.1	-
Rent	-	-	-	-	.1	-
Repairs	-	-	.1	-	.1	-
Advertising	-	-	.1	-	1.2	-
Interest	-	-	.1	-	.2	-
Energy	-	-	.2	-	.2	-
Other	-	-	.8	-	1.8	-
Profit	-	-	.6	-	1.1	-
Unallocated	-	-	-	3/ 2.8	-	-
Total	54.4	.9	8.1	4.0	10.7	78.1

1/ Includes labor, fuel, truck costs, and profit.

2/ Intercity.

3/ Includes local transportation.

Table 18.--Grade A whole milk sold through retail stores: Components of margins per half gallon at retail, 1973

Costs and profit	:	Farm value	Marketing functions				
			Procurement & assembly <u>1/</u>	Process- ing	Wholesale- ing <u>2/</u>	Retail- ing	Retail price
	:		Cents				
Labor	:	-	.34	3.4	7.5	2.9	-
Packaging	:	-	-	2.9	-	.2	-
Transportation ..	:	-	1.81	-	1.8	-	-
Business taxes ..	:	-	.03	.4	.6	.2	-
Depreciation	:	-	.05	.9	.3	.1	-
Rent	:	-	.02	.3	.1	.1	-
Repairs	:	-	.03	.9	.3	.1	-
Advertising	:	-	.01	-	<u>3/</u> .7	1.0	-
Interest	:	-	.04	.1	<u>4/</u>	<u>4/</u>	-
Energy	:	-	.02	.6	<u>4/</u>	.1	-
Profit	:	-	-	1.0	1.1	-	-
Other	:	-	.16	1.1	.6	.2	-
Total	:	33.2	2.51	11.6	13.0	5.1	65.4

1/ Includes laboratory and farm-quality field service, pickup at the farms, transportation, receiving and reloading as necessary, and final delivery to the processor.

2/ Performed by the processor.

3/ Dairy products, especially milk, are also advertised through cooperative ventures separate from other functions. It is not included in this estimate.

4/ Less than 0.1 cent.

Table 19.--Butter: Components of margins per pound at retail, 1973

Costs and profit	Farm value <u>1/</u>	Marketing functions					
		Procurement		Manufacturing <u>4/</u>	Wholesaling <u>5/</u>	Retailing <u>6/</u>	Retail price
		Contract hauling <u>2/</u>	Other <u>3/</u>				
			<u>Cents</u>				
Labor	-	-	0.29	1.78	.43	7.8	-
Packaging	-	-	-	1.46	.65	.2	-
Transportation ..	-	2.67	-	.07	1.40	-	-
Business taxes ..	-	-	.02	.08	.07	.4	-
Depreciation ..	-	-	.04	.26	.06	.2	-
Rent	-	-	.01	.08	.06	.2	-
Repairs	-	-	.03	<u>7/</u> .18	.04	.1	-
Advertising	-	-	-	<u>8/</u> .04	.04	1.4	-
Interest	-	-	-	.09	.04	.3	-
Energy	-	-	.02	.32	.03	.3	-
Other	-	-	.11	<u>9/</u> 1.05	.08	4.0	-
Profit	-	-	-	.28	.51	2.1	-
Total	62.9	2.67	.52	5.13	3.41	17.0	91.6

1/ Value of butterfat in butter at the plant less producer hauling charge.

2/ Of contract hauling costs, 2.26 cents was paid by producers and 0.41 cent by manufacturers.

3/ Costs to plants for hauling milk from farms in plant-owned trucks, laboratory and field service to producers, and operating, receiving and reload stations.

4/ In the manufacturing process, fluid buttermilk was produced but all costs were charged to butter.

5/ Includes prorated costs incurred by the wholesalers in printing and packaging butter into 1 pound cartons of quarter pound wraps for sale to retailers, assuming 35 percent of the printed butter was hard printed by wholesalers and 65 percent was soft printed by manufacturers.

6/ Includes retailer warehousing and distribution functions.

7/ Excludes plant labor used to repair buildings and equipment, which is included under labor.

8/ Dairy products are also advertised through cooperative ventures of manufacturers and producers. This cost is not included.

9/ Other ingredients (salt and color), general plant and office supplies, insurance, utilities, professional and other services, travel and related expenses, and other costs. Costs of seasonal storage are not included.

Table 20.--Apples: Components of margins per 3-pound bag at retail, 1973

Costs and profit	: Farm : value	: Marketing functions					: Retail : price
		: <u>1/</u>	: <u>2/</u>	: Packing	: Whole- saling	: Retail- ing	
		Cents					
Labor	-	-	5.1	-	16.6	-	
Packaging	-	-	<u>4/</u> 4.8	-	.6	-	
Transportation	-	-	<u>5/</u> .4	<u>6/</u> 5.8	-	-	
Business taxes	-	-	.2	-	1.1	-	
Depreciation	-	-	.4	-	.5	-	
Rent	-	-	.1	-	.7	-	
Repairs	-	-	.2	-	.4	-	
Advertising	-	-	<u>7/</u>	-	1.3	-	
Interest	-	-	.4	-	.3	-	
Energy	-	-	.2	-	.9	-	
Other	-	-	<u>8/</u> 1.7	-	3.5	-	
Profit	-	-	<u>9/</u> 1.1	-	2.2	-	
Unallocated	-	-	-	<u>9/</u> 5.9	-	-	
Total	30.4	2.5	14.6	11.7	28.1	87.3	

1/ Derived from SRS U.S. fresh apple prices minus the transportation cost from grower to packer. 2/ Regular (RA) and controlled atmosphere (CA) storage charges weighted by regional RA and CA storage statistics, adjusted by the proportion of the fresh pack entering storage. 3/ Average of BLS monthly prices weighted by unloads in 41 cities. 4/ Includes costs for the master carton, trays, bags, wrappers, liners, glue, and staples. 5/ Hauling from orchard to packinghouse or storage facility. 6/ Weighted average from production areas to 7 major cities. 7/ Less than 0.1 cent. 8/ Includes office, selling, inspection fees, insurance, waxing and fungicide supplies. 9/ Residual.

Table 21.--Applesauce: Components of margins per 303 can, 1973

Costs and profit	: Farm : value	: Marketing functions :			: Retail : price
		1/	Processing	Wholesaling	2/
		Cents			
Labor	-	2.4	-	2.9	-
Packaging	-	3/ 5.3	-	.2	-
Transportation ...	-	4/ .3	5/ .9	-	-
Business taxes ...	-	.1	-	.2	-
Depreciation	-	.3	-	.1	-
Rent	-	.5	-	.4	-
Repairs	-	.2	-	.1	-
Advertising	-	.1	-	.4	-
Interest	-	.3	-	.1	-
Energy	-	.3	-	.1	-
Other	-	6/ 1.5	-	.5	-
Profit	-	1.2	-	.4	-
Unallocated	-	-	7/ 1.8	-	-
Total	5.3	12.5	2.7	5.4	25.9

1/ Estimated from SRS prices of apples going to processing using a conversion factor of 64.5 cases of applesauce (24/No. 303 cans) per ton of apples. 2/ Average of BLS prices for Detroit and Pittsburgh. 3/ Includes costs for cans, cardboard containers, labels, and other supplies. 4/ From orchard to processing plant. 5/ Weighted average applesauce rail rates between major production and consumption centers. 6/ Includes selling costs, and insurance. 7/ Residual.

Table 22.--Oranges, California Valencia and Navel, all sizes: Components of margins per dozen at retail, 1973

Costs and profit	: Farm : value : <u>1/</u>	Marketing functions			: Retail price : <u>2/</u>
		Packing	Wholesaling	Retailing	
		Cents			
Labor	-	4.3	-	27.8	-
Packaging	-	3.6	-	2.3	-
Transportation	-	<u>3/</u> 1.5	<u>4/</u> 10.3	-	-
Business taxes	-	.9	-	2.1	-
Depreciation	-	.6	-	1.8	-
Rent	-	.1	-	2.5	-
Repairs	-	.4	-	1.2	-
Advertising	-	2.1	-	1.9	-
Interest	-	.1	-	.7	-
Energy	-	.3	-	3.1	-
Other	-	3.2	-	8.6	-
Profit	-	<u>5/</u> 1.2	-	5.0	-
Unallocated	-	-	<u>5/</u> 6.9	-	-
Total	32.9	18.3	17.2	57.0	125.4

1/ Derived from SRS crop season on-tree prices adjusted for harvesting costs.

2/ Average of BLS monthly prices for Chicago, Los Angeles, New York, and Seattle weighted by unloads. 3/ Hauling charge for shipments between grower and packer.

4/ Intercity transportation costs by most common carrier weighted by unloads in four cities. 5/ Residual.

Table 23. --Orange juice, Florida: Components of margins per 46-ounce can, 1973

Costs and profit	: Farm : value : <u>1/</u>	Marketing functions			: Retail price : <u>2/</u>
		Processing	Wholesaling	Retailing	
		Cents			
Labor	-	3.0	-	4.4	-
Packaging	-	10.4	-	.3	-
Transportation	-	<u>3/</u> .9	<u>4/</u> 6.8	-	-
Business taxes	-	.1	-	.3	-
Depreciation	-	.5	-	.3	-
Rent	-	.3	-	1.0	-
Repairs	-	.4	-	.2	-
Advertising	-	.7	-	.8	-
Interest	-	.3	-	.1	-
Energy	-	.3	-	.2	-
Other	-	1.7	-	1.2	-
Profit	-	<u>5/</u> 1.4	-	.7	-
Unallocated	-	-	-	-	-
Total	13.0	20.0	6.8	9.5	49.3

1/ Estimated from the season average Florida price reported by the Florida Canners Association (quoted at processor's door), using a conversion factor of 0.7780 box of oranges per case (12/46-ounce cans) of single strength orange juice, adjusted for transportation cost from grower to processor. 2/ Average of BLS prices for Detroit and Pittsburgh. 3/ Hauling charge from grower to processor. 4/ Intercity transportation costs by rail to Pittsburgh and Detroit. 5/ Residual.

Table 24. --Orange Juice, Florida frozen concentrated: Components of margins per 6-ounce can, 1973

Costs and profit	Farm value 1/	Marketing functions			Retail price 2/
		Processing	Wholesaling	Retailing	
		Cents			
Labor	-	.9	-	3.4	-
Packaging	-	2.2	-	.2	-
Transportation	-	3/ .5	4/ 1.1	-	-
Business taxes	-	5/	-	.2	-
Depreciation	-	.1	-	.2	-
Rent	-	.2	-	.1	-
Repairs	-	.2	-	.1	-
Advertising	-	.4	-	.4	-
Interest	-	.1	-	.1	-
Energy	-	.2	-	.3	-
Other	-	.7	-	.3	-
Profit	-	6/ 1.5	-	.3	-
Unallocated	-	-	6/ 3.2	-	-
Total	8.2	7.0	4.3	5.6	25.1

1/ Estimated from the season average price using a conversion factor of 0.4224 box of oranges per case (12/6-ounce cans), adjusted for the transportation costs from grower to processor. 2/ Average of BLS prices. 3/ Hauling charge from grower to processor. 4/ Intercity transportation costs by truck weighted by sales in New York, Atlanta, Chicago, Dallas, and Pittsburgh. 5/ Less than 0.1 cent. 6/ Residual.

Table 25.--Fresh tomatoes, Florida winter and early spring, all sizes and varieties: Components of margins per pound at retail, 1973.

Costs and profit	Farm value 1/	Marketing functions			Retail price 2/
		Packing	Wholesaling	Retailing	
		Cents			
Labor	-	1.6	-	10.4	-
Packaging	-	1.4	-	.5	-
Transportation	-	3/ .5	4/ 3.0	-	-
Business taxes	-	.1	-	.6	-
Depreciation	-	.4	-	.2	-
Rent	-	.1	-	.3	-
Repairs	-	.2	-	.2	-
Advertising	-	5/	-	.8	-
Interest	-	.1	-	.2	-
Energy	-	5/	-	.4	-
Other	-	.6	-	1.8	-
Profit	-	.3	-	1.2	-
Unallocated	-	-	6/ 11.0	-	-
Total	13.6	5.3	14.0	16.6	49.5

1/ Derived from SRS farm prices weighted by unloads in 41 cities. 2/ Average of BLS monthly prices weighted by shipments to New York, Atlanta, Chicago, Dallas, and Los Angeles. 3/ Includes charges from grower to packing plant. 4/ Intercity transportation rates weighted by unloads in New York, Atlanta, Chicago, Dallas, and Los Angeles. 5/ Less than 0.1 cent. 6/ Residual.

Table 26.--Canned whole tomatoes, California: Components of margins per No. 303 can, 1973.

Costs and profit	:	Farm value 1/	Marketing functions			:	Retail price 2/
			Processing	Wholesaling	Retailing		
	:		Cents			:	
Labor	:	-	2.3	-	2.7	:	-
Packaging	:	-	3/ 6.2	-	.2	:	-
Transportation	:	-	4/ .5	5/ 2.2	-	:	-
Business taxes	:	-	.1	-	.2	:	-
Depreciation	:	-	.9	-	.1	:	-
Rent	:	-	na	-	.2	:	-
Repairs	:	-	na	-	.1	:	-
Advertising	:	-	na	-	.4	:	-
Interest	:	-	.4	-	.1	:	-
Energy	:	-	.1	-	.1	:	-
Other	:	-	na	-	.1	:	-
Profit	:	-	na	-	.4	:	-
Unallocated	:	-	3.9	6/ 1.1	-	:	-
Total	:	2.4	14.4	3.3	4.6	:	24.7

na = not available. 1/ Estimated from the SRS California price of processing tomatoes using a conversion factor of 36.36 pounds of tomatoes per case (24/No. 303 cans) adjusted for transportation costs from grower to processor. 2/ Average of BLS monthly prices weighted by unloads in 39 cities. 3/ Includes costs for cases, cans, and labels. 4/ Based on an average charge of \$6.00 per ton. 5/ Intercity transportation costs weighted by population estimates for New York, Chicago, Atlanta, Dallas, and Los Angeles. 6/ Residual.

Table 27.--Tomato Catsup, California fancy grade: Components of margins per 14-ounce bottle, 1973

Costs and profit	:	Farm value 1/	Marketing functions			:	Retail price 2/
			Processing	Wholesaling	Retailing		
	:		Cents			:	
Labor	:	-	2.4	-	2.55	:	-
Packaging	:	-	3/ 6.7	-	.17	:	-
Transportation	:	-	4/ .7	5/ 2.9	-	:	-
Business taxes	:	-	.1	-	.21	:	-
Depreciation	:	-	1.5	-	.19	:	-
Rent	:	-	na	-	.69	:	-
Repairs	:	-	6/	-	.13	:	-
Advertising	:	-	na	-	.49	:	-
Interest	:	-	.5	-	.04	:	-
Energy	:	-	.3	-	.16	:	-
Other	:	-	7/ 2.3	-	.44	:	-
Profit	:	-	na	-	.28	:	-
Unallocated	:	-	1.8	8/ 3.5	-	:	-
Total	:	3.6	16.3	6.4	5.35	:	31.7

na = not available. 1/ Estimated from the SRS California season average price of processing tomatoes using a conversion factor of 53.45 pounds of tomatoes per case (24/14-oz. bottles), adjusted for the transportation cost from grower to processor. 2/ Average of BLS monthly prices for San Francisco and Seattle. 3/ Includes costs for cases, bottles, and labels. 4/ Based on an average California charge of \$6.00 per ton. 5/ Intercity transportation costs weighted by population estimates for New York, Chicago, Atlanta, Dallas, and Los Angeles. 6/ Less than 0.1 cent. 7/ Sugar, vinegar, salt, lye and spices. 8/ Residual.

Table 28.--Lettuce, California: Components of margins per head at retail, 1973

Costs and profit	Farm : value : 1/	Marketing functions			Retail price 2/
		Processing	Wholesaling	Retailing	
		Cents			
Labor	-	2.61	-	9.7	-
Packaging	-	1.31	-	.6	-
Transportation ..	-	3/ .30	4/ 6.12	-	-
Business taxes ..	-	.10	-	.6	-
Depreciation	-	na	-	.2	-
Rent	-	na	-	.2	-
Repairs	-	na	-	.1	-
Advertising	-	na	-	.7	-
Interest	-	.01	-	.3	-
Energy	-	na	-	.3	-
Other	-	5/ 1.61	-	2.4	-
Profit	-	6/ 2.26	-	1.7	-
Unallocated	-	-	6/ 2.88	-	-
Total	7.8	8.20	9.00	16.8	41.8

na = not available. 1/ Derived by subtracting costs for harvesting and field-packing from the f.o.b. price. 2/ Average of BLS monthly prices weighted by unloads in 41 cities. 3/ Includes hauling of empty cartons and stitching equipment and packed cartons to f.o.b. shipping point. 4/ Includes cooling and loading cost of 1.2 cents at point of production and intercity transportation costs to New York, Chicago, Atlanta, Dallas and Los Angeles of 4.9 cents. 5/ Includes insurance, telephone and telegraph, office sales salaries, brokerage fees, and allowances for damaged merchandise. 6/ Residual.

Table 29.--Potatoes, fresh: Components of margins per 10-pound bag, 1973

Costs and profit	Farm : value : 1/	Marketing functions			Retail price 2/
		Processing	Wholesaling	Retailing	
		Cents			
Labor	-	6.5	-	20.1	-
Packaging	-	3/ 5.7	-	.8	-
Transportation ..	-	.3	12.6	-	-
Business taxes ..	-	.2	-	1.4	-
Depreciation	-	.9	-	.9	-
Rent	-	4/ .5	-	1.2	-
Repairs	-	.1	-	.6	-
Advertising	-	.4	-	1.9	-
Interest	-	.4	-	.3	-
Energy	-	.4	-	1.5	-
Other	-	5/ 2.2	-	3.3	-
Profit	-	1.5	-	2.1	-
Unallocated	-	3.4	6/ 3.9	-	-
Total	49.8	22.1	16.5	34.1	122.5

1/ Includes on-farm storage, hauling to packing plant, and shrink. 2/ BLS monthly prices weighted by unloads in 41 cities. 3/ Includes cost of master container and polyethylene bags. 4/ Less than 0.1 cent. 5/ Includes administrative, brokerage, insurance, waxing, non-acceptance of shipped goods, and other unspecified costs. 6/ Residual.

Table 30.--Potatoes, frozen french fried: Components of margins per 9-ounce package, 1973

Costs and profit	: Farm : value <u>1/</u>	Marketing functions			: Retail price <u>2/</u>
		: Processing	: Wholesaling	: Retailing	
		Cents			
Labor	-	1.07	-	-	-
Packaging	-	<u>3/</u> 4.14	-	-	-
Transportation ..	-	<u>4/</u> .05	1.04	-	-
Business taxes ..	-	.05	-	-	-
Depreciation	-	.24	-	-	-
Rent	-	.03	-	-	-
Repairs	-	.12	-	-	-
Energy	-	.26	-	-	-
Unallocated	-	2.50	<u>5/</u> .96	2.4	-
Total	4.3	8.46	2.00	2.4	17.2

1/ Includes on-farm storage and hauling to processing plant. 2/ Average of BLS prices. 3/ Includes container materials as well as frying oil, caustic, and other additives. 4/ For moving raw product within plant and finished product to storage. 5/ Residual.

Table 31.--Rice (long grain): Components of margins per 1-pound package, 1973

Item	: Farm : value <u>1/</u>	Marketing functions		: Retail price
		: Milling, packaging, and wholesaling <u>2/</u>	: Retailing	
		Cents		
Labor	-	0.41	2.6	-
Packaging	-	.84	.2	-
Transportation	-	<u>3/</u> 1.56	-	-
Business taxes	-	.04	.2	-
Depreciation	-	.10	.1	-
Rent	-	.14	.4	-
Repairs	-	.07	.1	-
Advertising	-	.01	.5	-
Interest	-	.20	<u>4/</u>	-
Energy	-	.04	.1	-
Other	-	-	.3	-
Profit	-	-	.2	-
Unallocated	-	5.75	-	-
Total	16.9	9.16	4.7	30.8

1/ Based on an estimated farm price of \$11.47 per cwt. (derived from average prices for long and medium grain rice produced in the South reported by SRS and the price differential between long and medium grain milled rice) adjusted for value of byproducts (88.9% of farm price of rough rice charged to table rice) and an estimated yield of 60.2 pounds of table rice per cwt. of long grain rice. 2/ Cost components are for the milling function only. Based on Rice Milling Costs in the United States, 1971/72, updated by price indexes. 3/ About 85 percent represents intercity costs for packaged rice. 4/ Less than 0.1 cent.

Table 32 --White pan bread: Components of retail price per 1-pound loaf, 1973

Costs and profit	Farm : value of wheat : 1/	Assembly : of wheat : 2/	Marketing function				Retail price	
			Flour miller spread 3/	Transportation of flour to bakery 4/	Baker-wholesaler spread 5/	Wholesaler : processing : saling :		
Cents								
Labor	-	0.063	0.274	0.047	-	2.73	4.52	3.12
Packaging	-	-	.022	-	-	.82	.10	.20
Transportation ..	-	6/	-	-	-	-	.04	-
Business taxes ..	-	.002	.016	-	-	.08	.06	.17
Depreciation	-	.008	.038	-	-	.32	.22	.03
Rent	-	.001	-	-	-	-	.10	.12
Repairs	-	.006	-	-	-	.08	.06	.92
Advertising	-	-	-	.020	-	-	.78	.43
Interest	-	.003	.018	.004	-	.02	.03	.07
Energy	-	.005	.035	-	-	.14	-	.03
Other	-	.017	.162	.070	-	3.19	2.64	.72
Profit	-	.015	.221	.055	-	.21	.37	.47
Total	4.1	.317	.786	.196	.27	7.59	8.92	27.6

1/ Based on wheat prices received by farmers at country elevators less imputed value of byproducts.

2/ Difference between cost of wheat to the miller and farm value.

3/ Spread between f.o.b. mill value of flour (0.6329 lb.) used per 1-pound loaf of bread and the f.o.b. mill cost of wheat (0.01445 bu.) less imputed cost of millfeeds.

4/ Spread between the f.o.b. mill price of flour and the cost of flour to the baker.

5/ Spread between the estimated price received by bakers for bread delivered to store shelf and estimated cost of flour to baker. This deviates from the baker-wholesaler spread normally reported by ERS because it includes the cost of non-flour ingredients to the baker of 2.5353 cents. This cost is included in "other" processing costs.

6/ Transportation from country elevator to flour mill.

Table 33.--Salad and Cooking Oil: Components of margins per 24-ounce bottle, 1973

Costs and Profit	Farm value : <u>1/</u>	Marketing functions : Assembling & storage <u>2/</u>	Milling & processing	Whole-saling <u>3/</u>	Retail-ing	Retail price
			<u>Cents</u>			
Labor	-	-	1.6	-	3.0	-
Packaging	-	-	9.2	-	.2	-
Transportation ..	-	-	<u>4/</u> 1.3	1.6	-	-
Business taxes ..	-	-	na	-	.2	-
Depreciation	-	-	na	-	.2	-
Rent	-	-	na	-	.6	-
Repairs	-	-	.1	-	.1	-
Advertising	-	-	na	-	1.1	-
Interest	-	-	na	-	<u>5/</u>	-
Energy	-	-	.8	-	.1	-
Other	-	-	4.3	-	.3	-
Profit	-	-	na	-	.3	-
Unallocated	-	-	14.0	3.5	-	-
Total	21.9	6.2	31.3	5.1	6.1	70.6

na = not available

1/ Based on soybean prices received by farmers at the country elevator less imputed value of byproducts.

2/ Difference between price of soybeans, no. 1 yellow, Illinois country shipping points and farm value.

3/ Estimated at 5 percent of the retail price plus transportation charges from the mill.

4/ Based on "Carload Waybill Statistics" U. S. Department of Transportation for soybeans and soybean oil. 5/ Less than 0.1 cent.

Table 34.--Margarine: Components of margins per 1-pound package, 1973

Costs and profit	Farm value		Marketing functions				Retail price
	Oil	Dry milk solids	Assembling & storage	Milling & processing	Wholesale sales	Retailing	
	1/	2/	3/	4/	5/	6/	
Labor	-	-	-	1.1	-	2.9	-
Packaging	-	-	-	1.8	-	.2	-
Transportation ..	-	-	-	.7	0.4	-	-
Business taxes ..	-	-	-	na	-	.2	-
Depreciation ...	-	-	-	na	-	.2	-
Rent	-	-	-	na	-	.2	-
Repairs	-	-	-	.2	-	.1	-
Advertising	-	-	-	na	-	.6	-
Interest	-	-	-	na	-	.1	-
Energy	-	-	-	.5	-	.2	-
Other	-	-	-	6.9	-	.7	-
Profit	-	-	-	na	-	.5	-
Unallocated	-	-	-	.6	1.8	-	-
Total	13.3	0.7	3.5	11.8	2.2	5.9	37.4

na = not available.

1/ Based on soybean prices received by farmers at the country elevator less imputed value of byproducts.

2/ Difference between price of soybeans, no. 1 yellow, Illinois country shipping points and farm value.

3/ Estimated at 5 percent of the retail price plus transportation charges from the mill.

4/ Based on "Carload Waybill Statistics" U. S. Department of Transportation for soybeans and soybean oil.

Table 35.--Vegetable Shortening: Components of margins per 3-pound can, 1973

Costs and profit	: Farm : value : <u>1/</u>	Marketing functions				: Retail : price
		:Assembling :storage <u>2/</u>	:Milling & :processing <u>3/</u>	:Whole- :saling <u>4/</u>	:Retail : ing	
		Cents				
Labor	-	-	0.6	-	2.1	-
Packaging	-	-	11.3	-	.1	-
Transportation ..	-	-	<u>5/</u> 2.8	1.6	-	-
Business taxes ..	-	-	.1	-	.2	-
Depreciation	-	-	.2	-	.3	-
Rent	-	-	na	-	.9	-
Repairs	-	-	.2	-	.2	-
Advertising	-	-	na	-	.2	-
Interest	-	-	.5	-	<u>6/</u>	-
Energy	-	-	.3	-	.2	-
Other	-	-	.4	-	1.1	-
Profit	-	-	na	-	<u>6/</u>	-
Unallocated	-	-	20.0	5.5	-	-
Total	48.8	13.0	36.4	7.1	5.3	110.6

na = not available.

1/ Based on soybean prices received by farmers at the country elevator less imputed value of byproducts.

2/ Difference between price of soybeans, no. 1 yellow, Illinois country shipping points and farm value.

3/ Cost components are for milling only.

4/ Estimated at 5 percent of retail price plus transportation charges from the mill.

5/ Based on "Carload Waybill Statistics" U. S. Department of Transportation for soybeans and soybean oil.

6/ Less than 0.1 cent.

